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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

RASHID, DAVID

ART UNIT

PAPER NUMBER

2624

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/806,734	Applicant(s) LOEW, ANDREAS	
	Examiner DAVID P. RASHID	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

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Continued Examination Under 37 C.F.R. 1.114

[1] A request for continued examination under 37 C.F.R. § 1.114, including the fee set forth in 37 C.F.R. § 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 C.F.R. § 1.114, and the fee set forth in 37 C.F.R. § 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 C.F.R. § 1.114. Applicant's submission filed on Dec. 23, 2008 has been entered.

Amendments & Claim Status

[2] This office action is responsive to Response Under 37 C.F.R. § 1.116 received on Nov. 25, 2008. Claims 15-20 remain pending.

Response to Arguments

[3] Applicant's Remarks/Arguments filed Nov. 25, 2008 with respect to claims 15-20 have been respectfully and fully considered, but are not found persuasive.

Summary of Remarks regarding Rejections under 35. U.S.C. § 101

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Applicant's video signal constitutes a physical article or object that can be physically transformed, because video signals have distinct electrically measurable physical content. Further, applicant's claimed method produces a useful, concrete, and tangible result because the transformation of a video signal (especially in the case of the present invention) yields a result readily visible to persons of ordinary skill in the art.

Remarks/Arguments at 4.

However, though video signals may constitute physical articles or objects and are capable of being physically transformed (reasoning that such signals have distinct electrically measuring physical content), the video signals themselves in claims 15-20 are not physical but a pure form of energy or information (e.g., image pixels). The claims are directed to manipulating pure forms of energy or information "for. . . scaling of input video images. . . to produce output video images that can be displayed" and "outputting the. . . pixel or subpixel value to produce the output video image that can be displayed" (claim 1) and though citing the need for physical machines (i.e., a display for displaying), the claims do not sufficiently tie those signals to physical machines needed under *In re Bilski*. See § 101 rejection below.

Claim Rejections - 35 U.S.C. § 112

[4] The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Lack of Enablement

MPEP § 2107.01(IV) reads, in relevant part:

A deficiency under >the utility prong of< 35 U.S.C. § 101 also creates a deficiency under 35 U.S.C. § 112, first paragraph. See *In re Brana*, 51 F.3d 1560, 34 USPQ2d 1436 (Fed. Cir. 1995); *In re Jolles*, 628 F.2d 1322, 1326 n.10, 206 USPQ 885, 889 n.11 (CCPA 1980); *In re Fouche*, 439 F.2d 1237, 1243, 169 USPQ 429, 434 (CCPA 1971) ("If such compositions are in fact useless, appellant's specification cannot have taught how to use them."). Courts have also cast the 35 U.S.C. § 101 /35 U.S.C. § 112 relationship such that 35 U.S.C. § 112 presupposes compliance with 35 U.S.C. § 101. See *In re Ziegler*, 992 F.2d 1197, 1200-1201, 26 USPQ2d 1600, 1603 (Fed. Cir. 1993) ("The how to use prong of section 112 incorporates as a matter of law the requirement of 35 U.S.C. § 101 that the specification disclose as a matter of fact a practical utility for the invention. ... If the application fails as a matter of fact to satisfy 35 U.S.C. § 101, then the application also fails as a matter of law to enable one of ordinary skill in the art to use the invention under 35 U.S.C. § 112.")

Claims 15-18 are rejected under 35 U.S.C. § 101 because the claimed invention is not supported by either a substantial asserted utility or a well established utility. *See* 101 USC § 101 rejection above.

Claims 15-18 are also rejected under 35 U.S.C. § 112, first paragraph. Specifically, since the claimed invention is not supported by either a substantial asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

[5] The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Indefinite Limitations

M.P.E.P. § 2143.02(I) reads, in relevant part:

If a claim is subject to more than one interpretation, at least one of which would render the claim unpatentable over the prior art, the examiner should reject the claim as indefinite under 35 U.S.C. 112, second paragraph (*see* M.P.E.P. § 706.03(d)) and should reject the claim over the prior art based on the interpretation of the claim that renders the prior art applicable. *Ex parte Ionescu*, 222 USPQ 537 (Bd. Pat. App. & Inter. 1984) (Claims on appeal were rejected on indefiniteness grounds only; the rejection was reversed and the case remanded to the examiner for consideration of pertinent prior art.).

Claims 19-20 are rejected under 35 U.S.C. § 112, second paragraph for containing indefinite limitations in using the phrase “configured to” (e.g., “[a] film scanner with a drive for a control monitor, which is configured to execute the method of claim 15. . .” at claim 19, emphasis added).

A first interpretation allows an apparatus element having hardware configuration capable of performing its intended step (i.e., a film scanner containing the hardware configuration capable of executing the method of claim 15).¹ A second interpretation allows that it is in fact executing the method of claim 15.

Claims 20 is rejected by analogy.

Claim Rejections - 35 U.S.C. § 101

[6] 35 U.S.C. § 101 reads as follows:

¹ *See* “configure, n.”, Merriam-Webster Dictionary, 11th ed. 2008), < <http://www.merriam-webster.com/>> (citing “to set up for operation especially in a particular way”)

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

In Re Bilski – “Tied To” Criteria and/or Qualifying “Transformation”

[7] **Claims 15-18** are rejected under 35 U.S.C. § 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent² and recent Federal Circuit decisions³ indicate that a statutory “process” under 35 U.S.C. § 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process.

A process must have either a meaningful tie to an “apparatus”, or “machine”, or the process must perform a qualifying transformation to meet (1). With regard to (1) above, insignificant pre- or post-solution activity involving an “apparatus”, or “machine” is not a meaningful tie. Claim 15 recites “[a] method for. . .scaling of input video images. . .to produce output video images that can be displayed” and “outputting the. . .pixel or subpixel value to produce the output video image that can be displayed”. The machine required must be significant to the inventive concept (and not pre- or -post processing, or intended use statements as recited immediately above). In addition, when such machine is introduced and significant to the inventive concept, it must be a particular machine (e.g., a “processor”, not a “machine”).

With regard to (2) above, the pixels in the video image do not represent a physical object, nor is there any modification with external depiction separate from any insignificant pre- or post-solution activity, or intended use statements as recited immediately above. Claims 16-20 are rejected for failing to alleviate their respective dependent claims.

² *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

³ *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

Claim Rejections - 35 U.S.C. § 102

[8] The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Luo

[9] **Claims 19-20** are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Pub. No. 2002/0114535 (published Aug. 22, 2002; hereinafter “Luo”).

Regarding **claim 19**, *Luo* discloses a film scanner (fig. 1a, item 32) with a drive (fig. 1a, item 20) for a control monitor (fig. 1a, item 50), which is configured to execute (the “printer exposure configuration” of fig. 1a contains the hardware configuration such that claim 15 could be carried out) the method of claim 15.

Regarding **claim 20**, *Luo* discloses a film scanner (fig. 1a, item 32) with a drive (fig. 1a, item 20) for a control monitor (fig. 1a, item 50), which is configured to include a scaling circuit (the “printer exposure configuration” of fig. 1a contains the hardware configuration such that a scaling circuit of claim 18 could be included) of claim 18.

Allowable Subject Matter

[10] **Claim 15-18** would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. § 101 and 35 U.S.C. § 112, 1st paragraph, set forth in this Office action.

[11] The following is a statement of reasons for the indication of allowable subject matter:

Regarding **claim 15**, while the prior art of record teaches distributing the support points of two successive lines or columns of the input video image such that the support points of one

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line or column of the input image have an offset with respect to the other line or column (see Final Rejection at 3, Oct. 14, 2008 listing various offsets between support points of one line or column with respect to the other line or column such as a (i) memory read "offset" and (ii) distance "offset with respect to other various pixels in the image), the prior art of record does not teach distributing the support points of two successive lines or columns of the input video image such that at least one range lying between two support points of one line or column of the input image spatially overlaps an offset with respect to a corresponding range of a preceding or succeeding line or column. Claims 16-18 are allowable by dependency.

Conclusion

[12] Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID P. RASHID whose telephone number is (571)270-1578 and fax number (571)270-2578. The examiner can normally be reached Monday - Friday 7:30 - 17:00 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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